

Please amend the application filed on September 11, 2006 prior to proceeding with its examination.

IN THE CLAIMS

1-49. (Cancelled)

50. (Previously Presented) A process for the preparation of a microorganism's cell wall containing one or more pharmacological or nutritional substances soluble in an aqueous solution, comprising the following steps:

- i) drawing out the endocellular mass of a microorganism by means of a hypertonic treatment;
- ii) separating the endocellular mass and recovering the microorganism's cell wall; and
- iii) loading one or more pharmacological or nutritional substances soluble in an aqueous solution into the microorganism's cell wall recovered in step ii) by incubating said microorganism's cell wall in a hypotonic aqueous solution or an iso-tonic aqueous solution, comprising the pharmacological or nutritional substances.

51. (Previously Presented) The process according to claim 50, comprising a further step of chemical or physical inactivation of the microorganism's cell wall obtained in step ii), leaving the external membrane of the microorganism unaltered.

52. (Previously Presented) The process according to claim 50, wherein the microorganism in step i) is *Saccharomyces cerevisiae*.

53. (Previously Presented) The process according to claim 50, wherein said pharmacological substance is selected from the group consisting of antibiotics, anti-inflammatories, antibacterials, antivirals, antifungals, antiparasitic agents and vaccines.

54. (Previously Presented) The process according to claim 53, wherein said antibiotic is oxytetracycline.
55. (Previously Presented) The process according to claim 53, wherein said antibacterial is sulphadimethoxin.
- 5 56. (Previously Presented) The process according to claim 50, wherein said nutritional substance is selected from the group consisting of sodium quercetin, catechin, isocatechin, aliphatic polyalcohols, polyphenols, flavans, cyanins, resveratrol and hyperic acid.
57. (Previously Presented) The process according to claim 50, wherein said
10 nutritional substance is selected from the group consisting of cyanocobalamin, folic acid, thiamine, α -tocopherol and ascorbic acid.
58. (Previously Presented) The process according to claim 50, wherein:
in step i) the endocellular mass is drawn out by incubating the microorganism in a hypertonic solution of the same pharmacologically active substance to be loaded into the
15 microorganism's cell wall; and
in step iii) said pharmacologically active substance is already present in the solution and is loaded into the microorganism's cell wall with a change of the osmolarity due to dilution of the solution to hypo-tonicity or iso-tonicity.
59. (Previously Presented) The process according to claim 50, further
20 comprising a treatment of the microorganism's cell wall with a fixative or a disinfecting agent.
60. (Previously Presented) The process according to claim 50, wherein the hypertonic treatment in step i) is obtained by incubation of the microbial cell with or in a hypertonic solution comprising NaCl in concentrations greater than 0.2 M.

61. (Previously Presented) The process according to claim 50, wherein said hypotonic treatment in step iii) is obtained by means of a hypotonic solution comprising NaCl in concentrations lower than 0.12M.
62. (Previously Presented) The process according to claim 50, wherein the isotonic treatment in step iii) is performed by a 0.9% NaCl isotonic solution, optionally comprising sodium citrate 0.025 M.
63. (Previously Presented) The process according to claim 62, wherein the 0.9% isotonic solution comprises sodium citrate 0.025 M.
64. (Previously Presented) The process according to claim 50 wherein,
-said hypertonic treatment in step i) is performed with a solution consisting of 1.0 M NaCl and 0.05 M sodium citrate;
said hypotonic treatment in step iii) is performed with a solution consisting of 0.05 M NaCl and 0.005 M sodium citrate.
65. (Previously Presented) The process according to claim 50 wherein,
-said hypertonic treatment in step i) is performed with a solution consisting of 1.0 M NaCl and 0.05 M sodium citrate;
-said isotonic treatment in step iii) is performed with a solution consisting of 0.9% NaCl and 0.025 M sodium citrate.
66. (Currently Amended) A microorganism's cell wall loaded with a pharmacological substance selected from the group consisting of antibiotics, anti-inflammatories, anti-bacterials, anti-virals, anti-fungals, anti-parasitic agents and vaccines obtained according to the process of claim 53.
67. (Currently Amended) A microorganism's cell wall loaded with oxytetracycline obtained according to the process of claim 54.

68. (Currently Amended) A microorganism's cell wall loaded with sulphadimethoxin obtained according to the process of claim 55.
69. (Currently Amended) A microorganism's cell wall loaded with a nutritional substance selected from the group consisting of sodium quercetin, catechin, isocatechin,
- 5 aliphatic polyalcohols, polyphenols, flavans, cyanins, resveratrol, and hyperic acid obtained according to the process of claim 56.
70. (Currently Amended) A microorganism's cell wall loaded with a nutritional substance selected from the group consisting of cyanocobalamin, folic acid, thiamine, α -tocopherol and ascorbic acid obtained according to the process of claim 57.